

## INTERNATIONAL SEARCH REPORT

International Application No PCT/IB2004/051404
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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G06F13/40
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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED
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Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT
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Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 940 448 A (KUO JAMES R) 17 August 1999 (1999-08-17)  figures 3-5 column 2, line 34 - line 39 column 3, line 45 - column 4, line 42 -----	1,2,12, 15-19, 29,32-34
P,A	MOORE S ET AL: "Balanced self-checking asynchronous logic for smart card applications" MICROPROCESSORS AND MICROSYSTEMS, IPC BUSINESS PRESS LTD. LONDON, GB, vol. 27, no. 9, October 2003 (2003-10), pages 421-430, XP004453315 ISSN: 0141-9331 paragraph [0002] - paragraph [0003] -----	1-7,12, 15-24, 29,32-34

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

\* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the International filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the International filing date but later than the priority date claimed

"T" later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"Z" document member of the same patent family

Date of the actual completion of the international search

12 November 2004

Date of mailing of the international search report

27/01/2005

Name and mailing address of the ISA

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International application No.  
PCT/IB2004/051404

### Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
  
2.  Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
  
3.  Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1.  As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
  
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
  
3.  As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
  
4.  No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-7, 12, 15-24, 29, 32-34

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-7,12,15-24,29,32-34

The correction circuit comprises a plurality of multiplexers, each multiplexer receiving an input data signal, and a copy of the input data signal, from the communication bus;  
- a comparison circuit for comparing the parity signal generated by the parity circuit with a parity signal received from the communication bus, the comparison circuit providing the control signal for controlling the plurality of multiplexers to output either the input data signal or the copy of the input data signal.

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2. claims: 8-11,25-28

The encoder circuit comprising:  
- a plurality of parity circuits, the parity circuits generating a plurality of parity signals from the input data signals;  
- means for generating a plurality of control signals using the parity signals, the control signals being used to control the correction circuit;  
- wherein a gating circuit is provided in the path between each parity signal and the means for generating the plurality of control signals.

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3. claims: 13,30

Gating control signal is arranged to block the or each control signal from passing to the correction circuit until all of the input data signals have become stable.

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4. claims: 14,31

Gating control signal is a delayed version of a system clock signal.

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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International Application No

PCT/IB2004/051404

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5940448	A 17-08-1999	NONE	